THE GENESEE FARMER.

VOL. VII. ROCHESTER, N. Y. JANUARY 14, 1837. NO. 2.

PUBLISHED BY LUTHER TUCKER.

TERMS.—The Farmer is published every Saturday, making an annual volume of 416 pages, to which is added a Title-page and Index, at the low price of $2,50, or $2,00 if payment is made at the time of subscribing.

☞ All subscribers must commence with the volume, Jan. 1, or with the half volume, July 1. No subscription taken for less than six months.

☞ THE MONTHLY GENESEE FARMER is made up of selections from this paper, and published on the first of each month, forming, with Title-page and Index, an annual volume of 200 pages, at the low price of FIFTY CENTS a year, *payable always in advance.*

GENESEE FARMER.

SATURDAY, JANUARY 14, 1837.

Wintering Sheep.

In few kinds of business carried on by the farmer, is care more necessary, or skill and attention better rewarded, than in the raising and keeping of sheep. The finer wooled varieties of this animal—those from which the greatest profit is derived—are precisely the ones which suffer the most from neglect; and, by the inattention of the owner, often subject him to serious losses, which might, by proper precautions, be entirely avoided.

Sheep suffer the most from maltreatment in the early part of winter; any injury arising from neglect then, being, from the very constitution of the animal, very difficult to remedy afterwards. There is a point in the descending scale, to which, if a sheep is once allowed to fall, it usually renders all efforts to raise them unavailing.

One great cause of the losses sustained in keeping sheep through our winters, is the allowing them to "shirk" for themselves too long in the fall of the year. Scattered over the fields long after the frosts have destroyed every thing that is green, and perhaps after the earth is covered with snow, they gather a precarious subsistence, and are rapidly losing the flesh and the strength which, with proper treatment, would enable them to combat the rigors of winter, and what is termed the faintness of spring, successfully. Better to collect sheep into their yards as early as the first of December, and commence their regular feeding, than to wait until January before it is done, under the idea that by so doing, fodder is saved. There may be indeed a partial saving of fodder, but far too frequently such saving of fodder is the death of the sheep.

Another thing that occasions great injury to our flocks, is the keeping too many together. Observation must have convinced every farmer that a small flock of sheep, will, with the same feeding, do much better than large ones; that from forty to sixty is as many as can be advantageously kept together; yet it is nothing uncommon for men who call themselves good farmers, to keep from one hundred and fifty to three hundred in a flock.

Another great defect in the common treatment of sheep, arises from there not being proper attention paid to the respective health and strength of the animals, when flocks are divided into sections. These things should be looked to with great care, as to put a few weak and sickly sheep with a flock of strong hearty ones, is not only to ensure the loss of the former, but frequently to endanger the safety of the latter by the spread of disease. In such cases the weak ones, which require the best of the food given to the flock, are obliged to be content with the refuse of the whole, or such as has been rejected or trampled on by the strong; and the result is as might be expected from such an unskilful mode of proceeding.

Every man who keeps sheep should have one department of his flock devoted to his weak or sickly sheep, and no sooner does he discover one coming under either of these classes, than it should be immediately taken and placed where it can receive more attention and better food than is required by those that remain strong. Sheep when thus put into the hospital, as this division may be termed, should be fed with fine hay; roots cut fine and salted; oats in the sheaf, or an occasional handful of dry corn; and if every few days a quantity of pine or hemlock tops be given them, the effect will be good, furnishing a green, and for any sheep, a healthy change of food.

Those who wish to have their wool in fine order, and in such a state as to command the highest prices in the market, will pay particular attention, not only to their sheep having an adequate supply of food, but to the manner in which it is fed to them. Manufacturers dislike to have the wool they use filled with grass and other seeds, and from the additional labor such wool requires, usually compel the grower to submit to a deduction of some cents per pound. When hay is thrown from a stack, or a cow-house where sheep are present, unless some care is used, this result usually follows, as the sheep are certain to collect under the falling hay, and their wool receives and retains most of the seeds scattered at such times. So too when fed from the common elevated rack, their wool will be injured by the retention of seeds dropped on their necks and backs in drawing out their hay.

To avoid this evil and loss, racks should be used the sides of which are perpendicular, and which are so low that the sheep in getting his food need not fill his eyes and wool with dust and seed. Several plans for very good racks have been presented in former volumes of the Farmer; and no one can fail of constructing good ones, if he only avoids the errors of making them overhanging, and setting them too high. No animal whatever should be fed hay without racks, though there are few in which the benefit is so decided and apparent, as in feeding sheep. Where a number of sheep are kept together, and the hay for them is scattered over the ground in the usual manner, the whole flock will dog the heels of the feeder, and by the time he has been the rounds, the hay is so dirtied and trampled upon, that a large part of it is refused by the sheep and lost.

Some farmers maintain that drink or shelter is unnecessary, or that they are on the whole disadvantageous for sheep. This must be a mistake, for on such matters the decisions of instinct may much more safely be relied upon, than the mere opinion of any observer; and it is well known that sheep will always use drink, or will seek a shelter if one can be had, during high winds or severe storms. It is contrary to the order of nature that any animal should suffer injury from being kept comfortable. If the place of shelter is too small or ill ventilated, sheep are injured by being crowded into such confined limits; but it is the height of absurdity to suppose that the health of a sheep, and consequently the quality of the wool, will not be better, where care and comfort are attended to, than where both are neglected.

Economy m Feeding with Hay.

With many farmers it is considered sufficient that horses and cattle are fed with hay once or at most twice in twenty-four hours; and they would probably object to the trouble and labor of feeding them more frequently. They ought however, to reflect, that the injury which fodder sustains by the breath of the animal constantly blowing and condensing upon it, thus rendering it disagreeable and liable to be rejected and wasted, often occasions a loss, which greatly overbalances the trifling saving of labor and trouble. Some farmers think that there is no danger of animals suffering from hunger so long as there is plenty of hay before them; but if this hay has been lying a day under their breath, it will be found to have become so disagreeable and loathsome to them, that they cannot be made to eat it freely, without actually starving them to it. What farmer is there, who would be willing to eat a dish of food, the surface of which was covered with the gathered condensations of the breathing of twenty successive hours? Not many.

It ought, therefore, to be a rule with farmers, to give little hay at a time, and repeat it frequently, taking care at the same time that what was last given be consumed before any additional supply is offered. By this management none of the fodder will be lost, and the animals will derive the advantages of having fresh and wholesome food, for which they will at all times have a good appetite.

There is another point of economy which is well worthy of attention. It is not an uncommon occurrence, particularly in wet seasons, and often in consequence of bad keeping, that a considerable quantity of hay is more or less injured, so that cattle do not eat it freely, and it is frequently thrown aside as *bad hay*. Now cattle may often be made to eat this readily, and without any injury to themselves, by wetting it with brine, which not only renders it agreeable to the taste, but also has a beneficial effect on the animals, particularly in winter, when salting is apt to be neglected. In performing this operation a quantity of brine no greater than is sufficient to render it moderately damp should be applied, or else it will be unpalatable. The same effect will be produced if the brine is too strong. It may be conveniently applied with a common watering-pot. In mild weather, a considerable quantity may be prepared at a time, by sprinkling successive layers of hay and leaving it in a heap, but it should not be allowed to ferment. The moisture thus becomes equally diffused through every part, and it is in a better state than when freshly brined. In the same way, *straw* may be rendered very palatable for cattle, generally quite as much so as common unsalted hay.

Fattening Animals.

The high prices of grain the present season has brought the question home to the business and bosoms of farmers, whether merchantable grain of any kind can profitably be used in fattening beef or pork for sale. We think that it cannot; and we have no doubt the verdict of practical farmers will in general be with us, even when the high prices of meat are taken into consideration.

The confessions of some of the most celebrated dealers in cattle in England, admit that where cattle are purchased for fattening, and fed in the most accurate and scientific manner from the best materials, that there is oftener a loss than a gain by the process; and that most of the compensation consists in the pleasure of seeing a number of beautiful and fat stall fed cattle. Where the process of fattening in this country is carried on in the same way, with merchantable grain, the result has in general been found very similar. Where the feeding has commenced on grass, been carried on with roots, and finished with these, or with meal, a handsome profit is frequently realized by the feeder.

So with pork. The farmer who commences with sound corn, and finishes with the same, as he must if he begins with it—will have most likely good pork, but of a price which will more than compensate for any superior excellence it may possess. On the contrary the farmer who allows his pigs a clover field, the gleanings of his orchard, and the benefit of his dairy through the summer, things that are worth little in themselves, will find them when the time arrives for fattening, well grown, and in good condition, in attaining which two things nearly one half the corn given pigs is usually consumed. In this state, when put up, little of valuable food is lost in the fattening; but the peas, barley or corn given them ground or steamed, *tells* at once and perceptibly.

The introduction of the root culture, especially the ruta baga, has effected a complete revolution in the manner and profits of fattening cattle among farmers who are willing to be taught by experience. The saving in time and expense given in this way to the feeder, and the rapidity with which fat will be taken on by the animal that eats freely, would surprise one who had not tried the experiment. There existed at one time a senseless prejudice against the ruta baga for fattening cattle, grounded on the assumption, that the roots gave an unpleasant flavor to the beef. This notion may still exist among those who have not tried them, but twenty years experience in England and in this country, has shown the fallacy of such a supposition.

We saw a small cow knocked down the other day, that had been dried off late in autumn, put into good clove

feed for a month, and then fed with ruta baga for about the same time. She would eat a bushel in the morning and another in the evening; and had a supply of good hay and salt, with occasionally a basket of soft corn in the room of the turneps. The beef was of a very superior quality, and she gave one hundred and forty pounds of tried tallow. We do not mention this as any thing extraordinary; but, since the turneps at the most did not cost over six cents per bushel, it is evident the profits of this mode of feeding must be much greater, as well as made far less troublesome, than that formerly praticed.

SPRING WHEAT.

We invite the attention of the reader to the following valuable communication, from the Honorable JAMES M'CALL, of Allegany county, on the culture of Spring Wheat,—a subject which we think deserves more consideration among a large part of our farmers, than it has hitherto received Judge M'Call is a practical farmer, and his long experience in agriculture entitles his opinions to the most respectful deference, while the success attending his operations proves the correctness of his system.

The silicious nature of the soil, the softness and purity of the water, and the entire absence of all calcareous matter in far the greater part of the southern tier of counties, clearly proves that while it is not adapted to the production of Winter Wheat, it is favorable to all kinds of spring grain, and the cultivation of the grasses. Skillful farming may, and the example of Judge M'Call proves sometimes does, overcome these obstacles to the cultivation of Winter Wheat, but the uniform experience of that whole range of counties shows that Spring Wheat is more certain and productive.

The excellence of this part of New York for grazing, and the raising of stock and the dairy, has been fully shown by the past; that the soil can be wanting in fertility will not be pretended by any one who has witnessed the extraordinary crops of oats produced under the most imperfect and early methods of culture; or the rich returns of Spring Wheat where a more scientific mode of farming is pursued. The capabilities of this region have as yet been but little appreciated, and its comparatively secluded nature has prevented the rapid settlement which would otherwise have taken plaee. A different prospect is now before this section of the state; traversed by the New York and Erie rail road, and intersected by the Rochester and Olean canal, the difficulties that have attended a market will be done away; and the thousands that are wending their way to the unhealthy and desolate prairies of the far west, will many of them be diverted to a territory which must eventually become one of the finest farming regions of our widely extended country.

Cultivation of Spring Wheat.

Extract of a Letter from the Hon. JAMES M'CALL, *of Rushford, Allegany Co.*

In answer to your inquires with regard to my experiments and experience in the culture of Spring Wheat, I have the pleasure of saying they have both been very satisfactory. Previous to 1833, I had not for fifteen years sown any of that kind of wheat; when I was induced to sow two acres with three bushels of seed. The product of these two acres was seventy bushels of wheat. In 1834 my winter wheat was very badly frozen out; I went on and harrowed in Spring Wheat as soon as the frost had left the ground. Twelve acres of this wheat produced two hundred and seventy-six bushels, or twenty-three bushels per acre. Another piece of five acres produced one hundred and forty-nine and a half bushels, or thirty bushels to the acre. Another piece sown on wheat stubble, produced twenty-two bushels to the acre.

Last spring I sowed ten acres of wheat stubble, which was ploughed once in November, and the seed was harrowed in as early in the spring as the frost would permit; this will yield me twenty bushels per acre. I also, sowed four acres from which corn had been taken the year previous; and which will give me thirty bushels to the acre. As a continuation of my former experiments of sowing Spring Wheat on winter killed wheat, I sowed one bushel on some spots where Winter Wheat had been killed out by snow drifts, one half of which at least was picked up by the pigeons, yet the remainder produced sixteen bushels, and had I have sown all that was killled out of the piece of nine acres, it would have added to my crop fifty bushels more.

I am so well satisfied with my experience on this subject, that I would in all cases where wheat is badly winter killed, whether in spots, or generally, recommend to sow the ground to Spring Wheat, and harrow it in as early as you are satisfied that the old roots are dead. Harrowing lightly over wheat that is alive will not injure the roots at all, and the scattering Winter Wheat that grows up will produce no injurious effect. Between the two you are sure of a good crop; and besides you keep out of the land, grass, weeds, and other foul stuff, such as cockle, chess, &c., which every farmer knows will spread on the unoccupied soil to a thousand fold.

Some of my best neighboring farmers, have been for a number of years, in the practice of preparing their ground intended for wheat, in the previous fall, and sowing their Spring Wheat as stated above as early as possible, and have uniformly succeeded in getting good crops.

Spring Wheat is more apt to smut than Winter Wheat; but I have not had any smutty wheat of the kind, neither do I have any in my Winter Wheat. Being satisfied that smut is contagious, I have for twenty years washed all my seed wheat in strong brine, (or pickle,) and skim off all that floats on the top. When the wheat has drained in a basket a few minutes, I mix dry lime with it, letting it lie twelve hours, and if longer it will sustain no injury.

There are two kinds of Spring Wheat raised by farmers in the country, the bearded and the bald; which is the best to yield I am not able to say, having raised none but the bearded; but it is evident the bald would be the most pleasant to work amongst. Yours, &c.

Rushford, Nov. 12, 1836. JAMES M'CALL.

GOLD MINES OF VIRGINIA.

The following paragraphs from a private letter, were highly interesting to us, and we presume will prove equally so to our readers.

"Profossor Silliman has been recently in Virginia. He was employed by one or two companies who have gold mines in this quarter, to examine the ore, to make a detailed report of its value, and to communicate any other information, geological or practical, which might be of service to the companies. I understood he performed his duties to great satisfaction.

"These mines within a year or two past, have attracted the attention of speculators, almost as much as the public domain of the west, though not on the same extensive scale. They extend through several of the adjacent counties, and even into North Carolina,—the course being N. E. and S W.

"Professor Rogers in his Geological Report to the Legislature, thinks the auriferous rocks are not of contemporaneous origin with the regularly stratified rocks of the vicinity, but that they were forcibly injected by igneous agencies from beneath, rising in directions of least resistance, and therefore generally, though not uniformly, following the stratification of the rocks through which they passed. This inference he deduces from the facts that the veins are not of uniform thickness between the walls of the adjacent rocks; but being on the contrary very irregular in their forms,—at one point having a thickness of several feet; at another, very near to the former, contracting so much as only to measure a few inches across; and in other places sending off numerous veins into the enclosing strata. Another fact is that the dip is sometimes not conformable to that of the neighboring strata. The gangue is a variegated quartz.

"Professor Silliman in his report of an examination of the ore from one of the mines, gives it as his opinion that it is the richest in the world. From a bushel of the ore, he obtained (as well as I recollect,) about forty dollars worth of metal. It is therefore probable that some years hence, when the aids of science shall be brought to bear on the subject, the quantity of gold may rival that which was found in possession of Montezuma and his subjects.

"Some months ago, I was in that part of the country, and was informed by an intelligent gentleman engaged in mining operations, that there were abundant evidences of gold having been dug there in former times. They had discovered several feet below the surface, in the course of their explorations, instruments which had been evidently used to detach the quartz from its beds; and these instruments exactly resembled in their shape, those now in use. They were in fact what we call *picks*, made of granite or some other very hard rock, and having a hole in the middle for a handle: the ends being each about nine inches long. It must have been a long time since they were in use. This is inferred from the circumstance that there are no external signs of the earth having ever been disturbed, the trees of the forest being as large as in any other place."

We have only room to remark that evidences of ancient explorations also occur in the Gold Mines of Georgia.

Useful Tables and Calculations.

Some of the following calculations have we believe already appeared in former volumes of the Farmer, but we have found them in many instances so convenient, that we have believed a republication of what has already appeared would not be useless, and an addition from other sources be acceptable to the present readers of the Farmer. The nutriment furnished by different cultivated plants—the loss in different grasses by drying—the plants or trees that may be set on an acre at any given distance—and the weight of hay in the mow or stack, are subjects which all farmers at times find it useful to know, and of which none can be ignorant without liability to suffer loss.

A great number of accurate experiments show that on an average—

100	pounds	green	red clover	makes	27	lbs. of hay.
100	"	"	herds grass	"	40	" "
100	"	"	fresh meadow	"	38	" "
100	"	"	salt grass	"	39	" "
100	"	"	rowen or 2d crop	"	19	" "
100	"	"	corn stalks	"	25	" dry stalks.

Or in other words, six hundred pounds of green food make, when dry, one hundred and eighty-eight, showing the moisture lost by curing is rather more than two-thirds of the whole weight. —

The quantity of nutritive matter contained in the different substances used as food for man and beast, must always interest the farmer; for though it would not be safe to infer that those things which contain the most nutriment will of course produce the greatest benefit to the animal, this principle being modified by other ingredients that enter into the composition of plants, yet it affords the best criterion by which we can form an estimate of the value of any substance as an article of food. Fourcroy, Thomson, Chaptal and Davy, have investigated the matter carefully, and the latter has given the result in part of his researches as follows:

Of 1,000	parts of	wheat,	955	are nutritive matter.
"	"	barley,	920	"
"	"	oats,	743	"
"	"	peas,	574	"
"	"	beans,	570	"
"	"	potatoes,	230	"
"	"	red beet,	148	"
"	"	parsneps,	99	"
"	"	carrots,	98	"
"	"	Swedish turnep,	64	"
"	"	common turnep,	42	"
Of grasses, 1,000	"	meadow grass,*	98	"
"	"	sweet scented grass,	77	"
"	"	yellow oat grass,	66	"
"	"	saintfoin & red clover,	39	"
"	"	white clover,	32	"
"	"	lucern,	23	"

* Timothy and herdsgrass.

The best mode of estimating the contents of a stack, or mow of hay, is what every farmer should be acquainted with, yet how often is this whole business conducted on a system of guessing, and frequently very wild guesses too. A year or two since, a farming friend of ours sold part of a mow of hay, that had been well pressed by wheat, to a neighbor, and, as is customary, *guessed* there was a ton and a half of it. When loaded and taken away,

it was evident there were more than three tons, thus losing some twelve or fifteen dollars for want of a correct estimate. Experience has shown, that of timothy or herdsgrass hay, pressed in a mow or large stack, about ten square yards will weigh a ton. If the hay is clover, about twelve square yards will be required. Consequently, where the contents of a mow, or parts of one, are to be ascertained, nothing more is necessary than to make an estimate of the number of square feet contained in it, and by reducing these to yards, the number of tons is at once known. If a stack is to be estimated, the direction is as follows, copied from the Ohio Farmer:

"Suppose the stack to be ten yards long at the bottom, and eleven at the eaves; four and a half yards wide at the bottom, and five and a half at the eaves, and to rise three yards to the point of the roof; the contents of the stack are found thus—

Medium length, 10½ yards.
do. breadth, 5

52½

Medium height, 5 yards, including one-third of the rise [of the roof.

262½ square yards."

This last amount divided by ten, the number of yards required to make a ton, will give the weight of the stack as twenty-six tons and one-fourth. If the stack is round, the contents can hardly be ascertained with entire accuracy, without having recourse to geometry; still, an application of the above principles will enable the farmer to make a close approximation to accuracy, and will usually be found far preferable to random guessing.

In planting trees for fruit, for timber, fuel, or for ornamental purposes, farmers sometimes find some little difficulty in determining the exact number required for a given space: so in gardening, or root culture, where transplanting takes place, and the plants require a certain distance to reach perfection. This trouble may be saved by reference to a table like the following, which shows the number of plants, trees, &c. on an acre when planted at a great variety of distances. In experimental farming such a table is useful, as determining whether corn, ruta baga, and similar articles produced by the farmer, are more profitable at nearer or greater distances in the row, or from each other.

The number of plants, trees or roots on an acre, at the distance of one foot from each other,

	is 43,560	at 11 feet	360
at 1½ feet,	19,360	12 "	302
2 "	10,890	13 "	257
2½ "	6,969	14 "	222
3 "	4,840	15 "	193
3½ "	3,556	16 "	170
4 "	2,722	17 "	150
4½ "	2,151	18 "	134
5 "	1,742	19 "	120
6 "	1,210	20 "	108
7 "	889	25 "	69
8 "	680	30 "	48
9 "	537	35 "	35
10 "	435	40 "	27

Mr. Whitmarsh's Mulberry Fraud.

It is matter of regret that we find ourselves again obliged to revert to this subject. A great noise has been made about our charges at Northampton, and an attempt made to excite sympathy for *Mr.* Whitmarsh on the ground that we had refused to publish the letters of Messrs. Whitmarsh and Huntington, though we gave them to the public in the first paper issued after they were received. The charge against Mr. Whitmarsh of selling a spurious seed under a well known and popular name, at the enormous price of 480 dollars a pound, remain unanswered, except by the simple denial of the person implicated. The proof of our charges, however, rests upon good and responsible men, whose names and certificates we have given to the public; and we may add to this the evidence of the editor of the Silk Worm, published in our last paper, in which he states that he himself paid *seventy dollars* for 14 papers of the spurious seed. Now, we ask, is the simple denial of the person implicated, to counteract all this testimony? We trow not. Besides this, Mr. Whitmarsh's own agent, *Mr.* Huntington, acknowledges the deception practiced; for he says distinctly in his letter published in this paper on the 24th ult. that he himself "*supposed it was the Multicaulis,*" and that he did not learn that he was deceived until Mr. Whitmarsh arrived from Europe. If Mr. Whitmarsh did not wish to deceive the public, why did he send home an advertisement from Europe, so worded as to deceive eve nhis own agent? If he had discovered in Italy, as he now pretends, a variety of the Chinese Mulberry more valuable than the Multicaulis, why did he not send home a notice of his discovery, with a description of the plant, for publication in the papers, with an advertisement stating that his seed was of this new variety? The conclusion, with the facts before us, forces itself irresistibly on the mind, that *Mr.* Whitmarsh did actually intend to, as he actually did, deceive the public. But Mr. Huntington endeavors to escape the charge of deception, by saying that the agent who delivered the seed in this section, was "instructed to inform purchasers that it was not the Multicaulis." We have shown by the certificates of the purchasers themselves, that the agent, Mr. Fancher, *did not* thus inform them, and that they purchased it as the Multicaulis.

Now let us see how far Mr. Fancher corroborates Mr. Huntington's statement:

Northampton, Dec. 31st, 1836.

MR. TUCKER—I have been requested by Mr. Huntington to correct some statements in an article written by Mr. Rowe, which appeared in the fifty-second number of the Genesee Farmer. I will make a statement of the facts as they were. On the day previous to my leaving Northampton for Rochester and Greece, Mr. Huntington called and requested me to carry a small package to Reynolds & Bateham, Rochester. He stated that it contained 5 papers of Chinese Mulberry seed, and that on the delivery of said package I must receive twenty-five dollars, or not deliver it.

I delivered the said package on which was written "5 papers of Chinese Mulberry seed." Mr. Huntington also placed a quantity of seed in my hands to sell to such other purchasers as I might meet with, at the same time stating that it was *Chinese Mulberry seed* which Mr. Whitmarsh had recently brought from Europe, that it was *not* the Morus multicaulis, and in no case did I assert it to be such.

Mr. Rowe states that "Mr. Bradley informed me that a friend of his, Mr. Fancher, from Northampton, was at his house, and that he had some of the Chinese Mulberry seed for sale." Thus far the statement is correct; but that it was the Morus multicaulis I did not state. That I informed Mr. Bradley that I had sold twenty-five papers in Utica, is also a mistake, for I did not sell a paper in that place.

All that I disposed of was the five papers to Reynolds & Bateham, three papers that I left with Mr. Bradley for Mr. Rowe, two papers that I left in Rochester for Mr. Greenleaf of Brockport, and two papers that I sold in Syracuse.

I met with gentlemen who said that Chinese Mulberry seed was Morus multicaulis. I told them the seed I had was not the Morus multicaulis, but *Chinese Mulberry* seed, which Mr. Whitmarsh had recently brought from Europe, as Mr. Huntington stated.

With respect, J. S. FANCHER.

Mr. Huntington, in his letter published on the 24th ult. says: "I have seen him [Mr. Fancher] *to-day*, and he tells me that he gave the information [that it was *not* the Multicaulis] to those few who bought of him, and to Reynolds & Bateham themselves." It will be seen that *his witness does not confirm this statement.* Mr. Fancher, in the above letter, written at the *request* of Mr. Huntington, goes no farther than to say that he "did not say it *was* the *Multicaulis.*" He does not pretend that he even intimated to any one of the purchasers that it was *not* the *Multicaulis.* They took it of him as the Multicaulis, and he did not take the trouble to undeceive them. *But* it will be seen by the following certificate that Mr. Fancher was *understood* to say that it was the Multicaulis, by the friend at whose house he lodged, and with whom he left the seed for Mr. Rowe.

MR. TUCKER—Mr. Rowe was very particular to inquire whether the seed was of the genuine Chinese Mulberry—if not he did not wish to purchase. Mr. Fancher said it was genuine, and from Messrs. Rowe and Fancher's conversation, I all the time supposed it was the Morus multicaulis, and that the Multicaulis and Chinese Mulberries were the same. Mr. Fancher did not state to me that it was not the Morus multicaulis. Mr. F. said the article was in great demand, he had disposed of considerable quantities on his journey, that Mr. Whitmarsh's object was not to profit by the sale of the seed, but to promote the culture of silk. S. B. BRADLEY.

Jan. 10, 1837.

Thus it will be seen that we have clearly refuted all the averments of Mr. Huntington, which go to disprove our charges. *But* in a "P. S." to his letter to us, as published in the Northampton Courier, Mr. Huntington announces that he has made a discovery that renders farther evidence of the falsity of our charges "wasteful and ridiculous." This discovery consists in the fact announced to him by his associate, that copies of the Hampshire Gazette, in which the notice was inserted that the seed was not that of the Multicaulis, were sent to all those persons who had ordered seed. Now let us see how this mighty discovery operates to clear *Mr.* H. of the charges brought against him. *Messrs* Reynolds and Bateham, of this city, ordered $25 worth of this seed of Mr. Huntington. In reply *Mr.* H. says the seed, "which is more precious than gold dust," had not yet arrived, but their names were entered for five papers. The next they hear of it is on the 4th of May, when a gentleman enters their store and delivers them five papers, each of them containing one-sixth of an ounce of this seed, which, in the language of *Mr.* Huntington "is more precious than gold dust," and in truth it ought to be, the price charged for it being at the rate of $480 a pound. Well, what next? Why a week afterwards *Messrs.* Reynolds and Bateham received a copy of the Hampshire Gazette, in which they are informed that the seed is not, after all, that precious stuff they supposed it to be. Thus, by the kind attention of Mr. Huntington, they are informed in a week after they had paid their money, that they have been defrauded to the amount of $25. Now, suppose Mr. H. had not published this notice giving them this *gratifying* information, and for which he claims so much credit—why, then, R. & B., honest souls, would not have known that the seed was not more precious than gold dust, until its product should have shown them that they had paid $25 for that which was not worth 25 cents!

Further testimony in support of our charges seems unnecessary. We may, however, say that we have further proof, which shall be forthcoming if circumstances shall hereafter require it. But we hope it may not be necessary to recur to the subject again; though we assure the Northampton gentlemen that we shall sustain our charges until some satisfactory explanation, which bears the impress of truth, is given to the public.

EDMUND RUFFIN, Esq. editor of the Virginia *Farmer's Register*, thus introduces the statement which we published last week from the Silk Worm, to his readers.

"We cannot concur with the Editor of the *Silk-Worm* in admitting the least possible excuse for the conduct which he exposes in the following statement. A cheat has been perpetrated—most shameful in its manner, and enormous in amount and possible ill consequences to the new silk business of our country. Even if it were *credible* that a person so well informed as Mr. Whitmarsh is said below to be, on this subject, could have been so *deceived* by others, as soon as he knew of the fraud, he ought to have hastened to expose it fully, and to offer pecuniary compensation to all purchasers, to the full amount to which *he had profited* by the fraud. By not doing this—and continuing to maintain the value of his "Chinese Mulberry" seeds and plants, by a new description, Mr. W. has fully established his claim to the highest place among the numerous tribe of *wooden nutmeg venders.*"

Agriculture is an art,

Man is the artist,—the soil his laboratory,—manure his raw material,—animal strength and machinery his power,—air, heat and moisture his agent,—and grain, roots, fruits and forage, his product.

Agriculture is a science—which teaches the artist the best mode of improving and fitting up his laboratory,—instructs him in the properties and economical use of his raw material,—learns him how best to apply his power, and to profit by his agents,—and it thereby enables him greatly to abridge his labor and multiply his products.

The art teaches the hand to do—the science what to do, and how to do. Art is the sail which propels the ship,—science the compass which directs her course. Without the sails, the ship will not "go ahead;" without the compass, her course will be erratic, and the profits of the voyage doubtful. With sail and compass, her progress will be "onward," her course direct, and her voyage prosperous.—*Cul.*

Potash from the Beet.

M. Dubunfaut, a French chemist, has discovered that the beet, after extracting the sugar and molasses, will yield good potash, but whether from the residuum of the molasses, after distillation, or from the pomace we do not understand. The produce is about one pound from 100 pounds of the beet root. At this rate of yield, the beet annually manufactured into sugar in France would afford about 15,000,000 pounds potash, worth from eight to nine millions of francs, or from one and a half to one and three-quater millions of dollars. So say the prints.

COMMUNICATIONS.

LETTER FROM ULMUS.

Black Rock, January 4, 1837.

LUTHER TUCKER, ESQ.—*Dear Sir:* It is so long since I have written you, that I owe an apology for my silence; and it is now by an absolute effort that I steal from my pressing duties to wish you a happy new year, and another prosperous season to the Genesee Farmer.

From my long silence, do not suppose that I am at all unmindful of the interests and progress of your valuable paper, or that I have lost any of my solicitude for its welfare. I still read with great pleasure its excellent articles, both editorial, communicated and selected, and am gratified to know that so much spirit and discretion still directs your journal. I can only regret that it has not of late been in my power to add oftener my approbation by correspondence. But enough of personal affairs.

For the past few years my mind has been much interested in the agricultural prosperity of our country. Within that time an almost boundless region of the finest lands have been opened for settlement in the West; and they have been seized by our inhabitants, both of this and the Eastern states, for the purposes of speculation and actual improvement, with an avidity heretofore unparalleled. No wonder that our substantial farmers, bred in a comparatively barren region, in a rigorous climate, and on a flinty soil, should, in roaming over those delightful regions of the west, yearn to possess them. What individual, with an eye viewing that broad land of prairie, of wooded opening, of giant forest, with a soil of inexhaustible fertility, and an intelligent mind capable of appreciating and understanding the great sources of wealth to our country, but would seek to plant himself and his children in a land of such glowing promise, particularly such as are in the medium condition of life, and short of a competency? Thus thousands after thousands have passed on, made extensive purchases of lands, and with their families are making rapid settlements in that wild, yet rich and beautiful region. And they will find their account in it—themselves enriched by a regular course of industry, in a short time they will roll back a current of wealth through our own favored state, giving commerce to our cities, business to our canals, and employment to our rail-roads.

But a few years since, Western New-York was considered by our eastern brethren, as a far distant country; the great lakes a wide waste of waters bounding our territory on the west, and placing an effectual limit to our further progress. But what a change have a few years produced! We are now merely the *vestibule* to the western world. But few reflect that to the west of New-York, in the waters of the great lakes, lies an empire quadruple in extent and fertility to the whole country east of Buffalo; and that this vast territory, by its productive power, can support a much greater ratio of population than any of our eastern states. Few also understand that this land is now sprinkled with farms, embryo villages, rail-roads and canals, plainly indicating the genius and energies of a mighty people. In a few years that country will be alive with industry, bustling with commerce, and redolent of vigorous prosperity. And *west of us* lies all this favored region; all this mass of active beings that are destined in a very few years to contribute mines of wealth to us and to our state. On our canals must all their immense surplus pass into market, and their main articles of consumption return to them. Our rail-roads will be thronged with their people passing to and fro, and the great thoroughfares of this region must ever be their main avenues of transportation and trade. In a few years those parts of Pennsylvania, Ohio, Michigan, Indiana, Illinois and Wisconsin, to say nothing of a great portion of the fertile region of Upper Canada, that must of necessity transmit their products and receive their supplies through us, will be inhabited by millions! Industrious, enterprising and indefatigable, they *must* be, for they are descendants of our own state, and with them they carried to the land of their adoption the indomitable spirit of their fathers. Who then can calculate the results of their labors aided by the rapid improvement of the times, of which they have caught the full spirit?

Let me ask what effect will all this development have on the Agriculture of New-York? Has this immense emigration to the west, and its necessary effect upon our agricultural prospects, thus raised the value of our lands within the last three years, from twenty, to forty and fifty dollars per acre, or from forty up to a hundred? It may, and partially must be so. When the state of New-York resolved to dig the Erie canal, the North river and Mohawk people opposed it. They then raised great quantities of wheat, made great dairies, and their farms were worth twenty to thirty dollars an acre. Now the Erie canal is finished, and the west pours down its various products to New-York. The farmers of the river counties have abandoned the growing of wheat for the more profitable culture of hay and coarse grains. An extensive market is opened in the immense growth of the city of New-York, caused by the business of the Erie canal, for the minor productions of the farmer, and their lands are worth eighty to a hundred and fifty dollars an acre! What an unexpected and prosperous change is this! And must not such be partially the effect upon the rich farming lands of Western New-York? I certainly think so. Many who have sold their farms within the last ten years at what they deemed round prices, gave, as it has proved, most valuable bargains to their successors; and although they have doubtless made profitable exchanges at the west, they have left equally good investments behind. With an enlightened, intelligent course of agriculture, our prime farms are now worth to their owners, a hundred dollars per acre; and I doubt not in a very few years that will be an average price for farms throughout the Canal counties of Western New-York.

But three years ago I had serious intentions of purchasing a large farm in the neighborhood of Genesee river, and devoting myself wholly to agriculture. A beautiful and extensive estate on the river attracted my fancy, and its owner was anxious to sell it to me for thirty dollars the acre. It was well improved with all the modern appointments of good husbandry about it, and very productive. Other inducements however, attracted my attention, and I gave it up. On passing by the farm a weeks since, I was surprised and gratified to learn that it now pays its owner a round interest on a hundred dollars per acre, and that he refuses to sell it for seventy-five! Such instances too are not rare. Agriculture is beginning to assume that importance and respectability as a profession which it is eminently entitled to, and which a proper spirit in our farmers will immediately attain. Will not the prosperity of this valuable interest promote a spirit of improvement among our farmers? I think so. Improvement in almost every thing that appertains to American husbandry is much needed. Although many prominent instances of enlightened and really good agriculture stand out in bold relief among our farmers, yet as a whole we are miserably deficient in the true principles of the business. The science is little understood; less so than that of any other profession of our country. A fact unnatural and mortifying.

Why is it so? Why are farmers, as a body, more opposed to association and improvement in their profession, than any other class of our population? Why are *they* their and our worst enemies, and jealous of all who would promote their interests? The answer I leave for those concerned. The facts I assume as undeniably true. Why are the arts and sciences generally in our country so rapidly improving, as they manifestly are, both in intrinsic excellence and public estimation? It is because their professors and followers are increasing in intelligence and respectability; and these are more than in any other way promoted by ASSOCIATION. Hardly a profession exists in our country or in Europe, but has its associations, its fountains of improvement, its *bureau* of records and transactions, continually aiming at a higher standard of excellence or intelligence in its craft, and therefore continually improving. Look at the ten thousand associations of law, divinity, medicine, philosophy, commerce, mechanics—and in fact *all* professions, but poor devoted self-rejected agriculture! All other divisions of human intellect and labor cultivate and maintain an *esprit du corps*, save this.

I again ask, why is it so? Is this truly grand, intellectual and most natural profession of man so debased, so vulgar, so old fashioned as to be handed over to a herd of boors, as unworthy the attention of intelligent minds? It cannot be. I will rather ascribe it to indifference, to prejudice, and possibly a little unfounded, needless jealousy. This should be at once cast away, and our farmers should promptly take a bold stand for improvement. Efforts have often been made by our state legislatures to promote and encourage agricultural interests, and they have sometimes succeeded. But these benefits would not so remain. Our farmers, unmindful of their golden advantages, in many cases neglected to improve them, and other citizens of different professions, in endeavoring to sustain them, received their opposition; and so, all soon fell to the ground, and were not again revived.

This should not be so. Better feelings and interests should prevail. Our farmers have only to will it and they can COMMAND all the sources of improvement. This, however, must be done by *association*. Individual effort cannot do it. Public opinion, enlightened, concentrated, and freely expressed—*will command!* The present I deem a momentous period for the agricultural interests of New-York. The Empire State, actuated by a liberal policy in fostering her great works of internal improvement, by her fortunate local position, her great commercial mart, and her magnificent canals, may become the great *thumb screw*, either for good or for evil, of the nation. Her commerce will command the finances, her population the influence, and her agriculture, by a benign and liberal encouragement, the admiration of the whole country. Then why not improve it? It is all, and much more than all, within our power.

In a few months our state treasury will be in possession from the national revenue, of about FIVE MILLIONS OF DOLLARS. Why not appropriate a small part of this for the encouragement of agriculture? What more worthy object can be selected? None whatever. An agricultural convention is to assemble at Albany on the first Thursday of February. It will doubtless be a respectable one. There this matter should be discussed. Every county in the state should be represented, and their decisions would doubtless have an influence upon the legislature. A convention was last winter held at Albany. It was a collection of agriculturists of great intelligence and respectability, and held its session two days. During its continuance many subjects of great interest were discussed, and before its adjournment an application for a charter of an Agricultural School was resolved upon and commended to the attention of the legislature. The charter, a liberal one, was obtained, and I have great confidence that within a few years we shall have within our state a school for agricultnral education of high and enduring character. To this institution, the state, from its large funds, should contribute. Our colleges and academies have received liberally of the public bounty, and why should not the *professional* education of our farmers be promoted?

It is a subject to which we should all be awake and urgent. Let us have a liberal and consistent spirit, and be thoroughly represented in our convention, and we shall succeed.

But I must close. I could say more upon this interesting subject, but I might be wearisome. If I can catch time I may write you again. You will observe by the date of my letter that I have removed to this village, about two miles from my late residence in Buffalo: it is nearer my farm and more convenient to my avocations. Had I leisure and space, I might tell you of my progress in farming, my improvements, and my stock; but nothing very creditable in either, save my beautiful short horn cattle, Bakewell sheep, and China pigs. These all continue to improve and to gain in my confidence. But enough. Most truly, yours. ULMUS.

Making Butter.

MR. TUCKER—In a late number of the Farmer, I observed an article containing some very useful hints on the subject of making butter in the winter, an attention to which I am convinced will add much to the profit of those concerned in winter dairies. To what is there said I wish to add that a thermometer is indispensable in making butter, especially in the winter, if ease in making, and the quality of the article made, is taken into the account.

Every dairy woman knows if the temperature of the cream is too low when churned, it will be con-

verted into butter with great difficulty. If it is too high, the butter will come quicker, but be of an inferior quality. The proper temperature at which the saving of labor in churning and the production of good butter, can be united, experience has proved is from 55° to 62°. If below this it is too cold, if above too warm. To ascertain this point a thermometer is necessary, though dairies are rarely provided with them, and the business is conducted of course by guess work; and the loss of time and labor, not to speak of the inequality, and consequently of the inferior nature of their products, would more than pay for half a dozen of these instruments in a season. A friend of ours remarked to us the other day, that churning used to be one of the most uncertain and tedious of operations, but since he had adopted the plan of bringing the cream to a proper temperature before commencing, he experienced no trouble whatever. A sliding thermometer, suitable for the dairy, or any ordinary purpose, may be obtained for 12 or 14 shillings, and should be found in the dwelling of every farmer. THERMO.

An "old Farmer's" Opinion.

MR. TUCKER—I wish through your columns to tender my thanks to A. B. for his candid, pertinent and judicious remarks on an article I wrote under the head of wheat turning to chess. His remarks appear in your paper of December 17th. In that article, I presented facts just as they appeared—that is apparent facts, without any coloring. It was not my object to express what I believed or disbelieved about the transmutation of plants; still as many do believe in this, I pressed the argument on that side of the question, and attempted to account for this supposed deviation from the common course of nature as well as I knew how. I was willing there should be a fair and thorough discussion of the subject, and was not aware at the time how far it had been discussed. I am somewhat surprised that Mr. Chapin should say in your paper of the 24th inst., that "an Old Farmer" has informed the public that he has ascertained "for certainty that wheat does in some instances produce Chess." I have not said this, nor any thing that implies it; but I did say "it seems pretty evident that wheat turned to chess in one instance," and there was seeming evidence of this. There were several circumstances that seemed to indicate that wheat had turned to chess; but I did not say that it had, or even that I believed it had; and if Mr. Chapin will read the whole article attentively, I think that he will be likely to infer that I do not believe it. The appearances however were such as would lead me to believe it, did I not know that this is contrary to an established and fundamental law of nature—in popular language, it is the nature of plants to produce their like, or plants of the same kind. This principle or property in plants is noticed in the history we have of the original creation of plants, each bringing forth "seed after its kind." If there is any essential difference between wheat and chess, that is, if they are distinct kinds of plants (and there can be no doubt of this,) then wheat can never turn to chess under any circumstances whatever, without changing its nature; and so changing the nature of a plant as to turn it into another of a different kind would be equivalent to creating a new kind of plant, and giving it a specific nature distinct from any which has ever existed. While in a few instances there has been seeming evidence that wheat turned to chess, on the other hand there has been real, continual and overpowering evidence from year to year that wheat retains its distinctive character. I said before that wheat never turns to chess by a regular process of nature. I say now, without hesitancy or fear of contradiction, that wheat never can turn to chess except by a supernatural cause. AN OLD FARMER.

Culture of Ruta Baga on New Land.

MR. TUCKER—As you are in the habit of receiving communications from your subscribers on Agricultural subjects, I forward the result of an experiment on the culture of the Ruta Baga. I commenced farming in this county the last spring, and having had some experience in the culture of the Ruta Baga, and our land being new, I tried an experiment on new land, a piece that had been what is called slashed, that is, the trees all cut down and left in that state for about two years. I cleared off between two and three acres, and got a burn in May, although not a very good one, and fitted the land as for a wheat crop. On the the 20th of June sowed with Ruta Baga, broad cast, about three fourths of a pound of seed per acre and harrowed in well. The only mistake I made was sowing too thick, as thinning the crop was the greatest part of the labor after the ground was fitted, and nearly equal to harvesting. I consider that half a pound to the acre is quite sufficient. The result was that where the land, as it is termed, had a good burn, the crop turned out from 800 to 1000 bushels per acre, and the whole expense after the land was prepared for the harrow, including thinning out and harvesting, was not to exceed four cents per bushel. The land was a gravelly loam, resting on a hard pan about 12 or 15 inches deep, but not very wet. I am feeding out this crop principally to sheep, of which they are very fond. In order to test their value for cattle, I took from my dairy the last of October a cow about 9 years old, in middling order, that had been milked until that time, and had brought a calf in the spring, tied her up in the stall without water, and gave her all that she would eat. She eat not over 50 bushels in six weeks, had no other feed except dry hay; when we butchered her she was excellent beef, with 60 lbs. of rough tallow; not reckoning the hay; she paid at least two shillings per bushel for the Ruta Baga she eat. I am sensible that the value of the Ruta Baga is well known; but with me it was an experiment in raising it on new land, which may be useful to some farmers in a new country.

Very respectfully, your ob't servant,

JABEZ BURROWS.

Mayville, Jan. 2, 1837.

Productions of Wisconsin.

Milwaukee, Wisconsin Territory, December 17th, 1836.

MR. TUCKER—In order to prevent the farmers of our country from falling behind the rest of the community in their knowledge of this new and interesting country, I propose to furnish you with a few facts, which, (if you deem them of sufficient importance) you may lay before the readers of the "Farmer."

You will perceive by the accompanying paper, the "Milwaukee Advertiser," that one of our most spirited and enterprising citizens, (Byron Kilbourn, Esq. has, in consequence of there being as yet no agricultural society formed here, offered premiums for the best Ruta Baga and common English turnep, the best ten potatoes, the best beet, the best raddish, and for the heaviest bushel of oats.

In another part of the paper you will find it stated that the land on which Milwaukee is situated, was purchased of the United States in August 1835, and the lands surrounding the town are still almost entirely in the hands of the government. Until the present year scarcely an acre of ground was cultivated within seventy-five miles of us. It cannot therefore be expected that our farms are managed in the best manner, or are made to yield their greatest product—but the following statement of some of the articles presented for premiums will show that our soil will bear a comparison with *any in the world.*

60 potatoes, raised 4 miles west of the town, measured a bushel, and weighed 64 pounds.

10 of them weighed 13 pounds and 6 ounces.

60 potatoes raised at Prairie Village, 17 miles west of Milwaukee, measured a bushel and weighed 68 pounds and 12 ounces.

10 of them weighed 13 pounds and 14 ounces.

2 of the largest weighed 3 pounds and 8 ounces.

10 potatoes raised on the Milwaukee river, 3 miles above town, weighed 14 pounds, or nearly one and a half pounds each.

I have mentioned these three instances to show that it is not a single case which might, perhaps, be an accidental *lusus naturæ*, but the natural product of the whole neighborhood. Of those raised at Prairie Village it is said "that a hoe never was near them." The method of cultivation was this—a furrow was made in the prairie and a few potatoes strewed along the bottom of it, and then the sod of another furrow turned over upon them. In this situation they were left until they were dug with a spade or shovel—for in our new country hoes are not to be had.

In order to show that the soil is deep, and naturally mellow, a carrot was presented which was 17 inches in length and which had grown on the prairie with very little cultivation.

Besides these I will mention the following as some of the articles presented.

A Ruta Baga Turnep 2 ft. 9 in. round, weighed	23 lbs. 8 oz.
A common Eng. Turnep 1 ft. 10 in.	8 " 8 "
A Raddish, 1 ft. 2 in. round,	4 " 5 "

These are facts which will speak for themselves and therefore need no further comment from me.

I would suggest to persons engaged in making agricultural implements of every kind that they would not only find it to their interest, but would also be doing "the country some service," by sending here at as early a period as possible next spring a large quantity of such implements. This will appear evident when I mention the fact that although the land in this vicinity *belongs* mostly to the government yet there is not a quarter section within ten miles that is not *claimed*—i. e. taken possession of, and more or less improved by individuals: and as all the products of the soil are selling for cash and at high prices (corn selling readily for $2,50—oats for $2,00 & potatoes for $1,25 per bushel, & other things in proportion) there is a general disposition among the *claimants* to make further improvements and to cultivate their lands extensively. But there is scarcely a man in the whole country that is supplied with the *necessary* farming utensils.

Although I resided at Rochester at the time she was making her most rapid strides in the march of improvement, and have since lived in various parts of the United States, I have never seen a town spring up so rapidly as Milwaukee has done. At the time the town was laid out, which was only about a year ago, there were not more than half a dozen families within 75 miles; but now how changed! The whole country is occupied—the town numbers 1500 inhabitants and 200 houses. There have been 223 arrivals of vessels at our port since the 14th of April last—besides many others which were not registered. If any person doubts these facts, let him "come and see."

Very respectfully, L. A. L.

On Laying Stone Wall.

MR. TUCKER—As I understand that experiments find a ready admittance into your paper, I would offer you mine on *walling*, if you think it worthy of a place. Some eight or ten years ago I commenced laying wall; the stones mostly used were rather small, and many of them cobble stones. I began without any previous knowledge of the best method, and commenced building 3½ feet wide on the surface of the ground, pitched the outside stones a little in, and laid it 3½ feet high, and staked and put rails upon the top. This fence soon began to tumble. I also laid some 3 feet in width: this stood some better, but not well: and some I laid 2½ feet wide: this stood better yet. I then tried some of the same width, by digging a little into the ground, filling the ditch with the poorest cobble stones; this did still better, but was not perfect. I have practiced for three years past building but 2 feet wide at bottom, always digging a ditch to the depth of say one foot, more or less, according to the ground, digging deeper where the ground is soft, laying cedar or chestnut sticks very frequently crossways of the wall for binders, and laying the wall thin at the top. This method I find to be decidedly the best, for the wall built in this way has not yet tumbled, or even racked in any instance that I have discovered. The last season I commenced laying five feet wall in the same way, and am convinced that it will do well, at any rate I am resolved to pursue this plan, that is, dig through the light soil and below the frost, 2½ feet wide, fill with cobble stones, then lay the wall 2 feet wide at bottom with sticks for binders, and build 5 feet high and thin at the top.

ALVIN RICE.

N. B. You may tell your subscribers that I am highly gratified, and I think not a little benefited, with the perusal of your paper, and that I would not be without an agricultural paper for the best cow in town, per year. A. R.

Hannibal, January, 1837.

STONE WALLS.

MANNER OF CONSTRUCTING THEM.

MR. TUCKER—Of all the different kinds of writings, none are to me more interesting and instructing than

these of travelers. The manner in which they relate the various incidents with which they meet—the interest they take in the arts, agriculture, and curiosities of a country, indicate with great accuracy the bent of their minds. Thus in the travels of Prof. Silliman, we see the philosopher, the geologist—in those of Carter, the statesman, the admirer of grand and beautiful scenery—of Prof. Humphrey, the accurate observer of men and things. While many men travel over a country without imbibing a single new idea, and can tell of nothing worthy of notice, save of the good things they may have eaten by the way; others, as a Colman or an Ulmus, will tell of the various improvements in agriculture, state of the crops, beautiful farms, orchards of rare fruit, &c. Farmers usually remark upon the quality of the soil, farm buildings, cattle, and whatsoever is new in farm implements, or admirable in the tillage or crops of the country.

During my excursions, which have extended but little farther than *to mill and to meeting*, my attention has been particularly directed to fences, the different materials of which they were composed, and their comparative durability. I design, agreeable to my caption, to make a short article on the different kinds of stone wall, and the manner of building them.

The best, of course, is a full height real New England wall, but as we have no stone for building such walls in Western New York, it is needless to remark further upon it. Half wall, built three feet high of stone, and surmounted with posts and boards, rails or poles, is becoming quite common; but as there is so great dissimilariyt in the manner of building it, it may be profitable to describe some of the different ways, and remark upon their relative advantages.

The handsomest wall I ever saw was made of cobble stone, three feet high, three feet wide at bottom, one and a half at top—laid in regular courses, the largest at bottom —having strips of cedar running through the wall every few feet to act as binders. Posts sawed six inches square at bottom, tapering to two by six at top, were inlaid once in seven feet. To these were nailed two boards six inches wide, with six inches of space between them. Wall made in this manner is very durable, except when exposed to high winds. In exposed situations, the wall is very liable to be thrown down, by the posts acting with a great purchase upon it.

Another way of making half wall, and I think more durable, is of common field stone, the thickness of which is governed somewhat by the quality of the stone—three feet high, and surmounted by a pole of black ash or cedar, sometimes laid on blocks raising them three or four inches above the stone, and at other times small stones are laid so as to nearly cover the pole. Across this pole stakes are driven once in twelve feet, and then another pole laid in such a manner as to break joints with the lower one. A fence made in this manner, if the stone are well laid, will not blow down, and I think far more durable than the former. Stakes standing out from the wall are objected to as unsightly, and perhaps they may be sometimes in the way in ploughing.

To prevent frost throwing the fence, flat stones are laid slanting so that the water may run off from them. This I think important.

Another method I have seen practiced, is to lay turf between each layer of stone. This adds to the appearance of a wall, and I think when proper turf can be obtained, tends to strengthen it. the moisture of the stone keeping the turf from decaying.

In conclusion I would remark, that the materials for making half wall are much more common than those who have never made any wall would suppose. Let a farmer who has a field which he designs to plough, draw off all the stone to one side of the field before he commences. After the field is ploughed, harrowed and sown, and before he goes on with the roller, let him go over it again with his stone boat; and follow this practice for two or three years, and if he does not have stone enough to make a half wall on one side of his field, he will have at least very much improved the appearance of it.

O. P. Q.

ON THE CULTUR OF INDIAN CORN.

USE OF LIME, PLASTER AND ASHES IN THE HILL.

Mr. Tucker—In answer to an inquiry in your December number of the Monthly Farmer, whether lime, plaster and ashes, have ever been used in hills of corn, I would observe that I have been in the practice of using them for the last 4 or 5 years. Previous to using the composition myself, I read in the New England Farmer of mixing lime, plaster, and ashes together, and puting a handful in every hill, and after drawing a little earth upon it, dropping the corn and covering as usual. His practice was for every five bushels of unleached ashes to add half a bushel of lime and half a bushel of plaster, which were well mixed together, the six bushels being sufficient for an acre. In addition to the composition being an active manure, it is an almost sure preventive of the destruction of the corn from worms. I am fully satisfied that I have experienced great benefit myself by using the ingredients. I will add a satisfactory result which occurred on my own farm, in using the composition. The person who lives with me, in planting a piece of land of about 4 acres, the last year, found that his composition was expended, before he had finished his piece, and being about a mile from home, concluded he would complete his planting without getting any more of the articles, there being only 4 or 5 rows to plant. But he was much surprised, during the season, to observe the difference of that part, on which he had omitted to put the composition, from the rest of the piece, and when it was gathered he thought it did not yield more than one half, having evidently suffered much from worms. J. E.

West Springfield, Dec., 1836.

RAISING FLAX FOR THE SEED.

Mr. Tucker—I will attempt to answer the inquiry in relation to the flax crop, in Vol. 1, Monthly Farmer, page 174. It has been cultivated in this county (Seneca) for 5 or 6 years past for the purpose of a crop of seed, followed with wheat in the fall. Ten bushels per acre is full or more than an average crop—some few cases as high as 20 bushels, but more frequently short of 10 bushels than over it. I think it does not injure the coat by sowing thin, but of the two it has a thicker, heavier coat than when sowed thicker, and the quality about as good. Half a bushel of seed appears to be enough for any land here. If the land is strong and very mellow, less will answer. I have raised 57 bushels on three acres where I sowed but 12 quarts of seed per acre.

It has been cultivated by our largest farmers as well as by the smaller ones, but the practice is decreasing very fast. When it was first introduced it was said it did the land no harm—the chance for a crop of wheat being considered better than on a summer fallow; but by experience we have found it not so. The truth is, it injures land as much as a crop of oats, or any other grain. It has to be taken care of at that season of the year when every farmer, who wants to raise a crop of wheat, ought to be preparing his land for it; and if he has 20 or 30 acres of flax to harvest and thresh, he is from two to four weeks doing it; the consequence is, his wheat is sowed late, he stands a good chance for a light crop, the straw good for nothing for fodder and worth little for manure. It would not pay the cost for a farmer to pull all his flax so as to save it for the coat—hired help is scarce and very high—and after it is all prepared for market, it is not worth more than from 8 to 10 cents per pound. If he has a family of boys, he had better keep them at school during the winter months, than getting out flax at that price. The chance for wheat after it, is not so good as a clean summer fallow by one-third, and often by one-half. My reason for it is, the ground being ploughed but once for flax in the spring, and once after the flax is harvested for wheat, it does not subdue the grass and weeds sufficiently to prepare it properly for wheat; and I think that he who continues the practice a few years longer will be like the farmer who sows no clover, and like him will soon have to sell his farm to his better managing neighbor, or have it sold for him., (not much difference which,) and take up his march for the west. Jo. Wicnorr.

Romulus, Dec. 20, 1836.

From the Farmer's Register.

COMPARATIVE VALUE OF APPLES,

TO FEED STOCK, AND FOR SALE, AND THEIR PRODUCTS, CIDER AND BRANDY.

During the two last summers and falls, my duties called me into the apple regions of the north. The following facts were obtained in reference to the subject of apple cider and brandy.

1. Cider drinkers are peculiarly subject to rheumatism, to inflamed eyelids, to headache, bleeding at the nose, to sores and ulcers, difficult and tedious to cure, to affections of the stomach and bowels, and to premature trembling of the hand and head.

2. Cider drunkards are the most brutish and cruel of the unhappy tribe of inebriates.

3. An old orchard and a distillery, are almost invariably indices of widows, orphans, poverty and drunkenness.

4. There is a great loss of money in making either cider or brandy. Good eating apples are worth on an average 25 cents a bushel. Eight bushels of apples make a barrel of cider, and twelve barrels of cider make one barrel of brandy. Brandy at 50 cts. per gallon would give about 15 cents per bushel for the apples. The loss is ten cents per bushel. This, on an orchard of one hundred trees, in ten years, would be over one thousand dollars! No allowance is made for capital and labor connected with distilling. Take these into consideration, and the loss is much greater.

5. It costs no more to raise good apples, suitable for market, than to raise apples only suitable for distilling. Very often apples are worth one dollar per bushel, and the loss is immense, by turning them into brandy. I am told that in Mobile, apples sell now for ten dollars a barrel!

6. Engrafting and budding will change the character of an orchard, and more than compensate for the time and amount lost in producing the change, in ten years.

7. Apples make most excellent food for horses. Several physicians of extensive practice, in Connecticut and Massachusetts, feed their horses on apples and hay. I have never seen fatter horses—more sleek and spirited. The hair is much more lively, and requires less grooming than that of horses fed on grain. Mr. Norton of Farmington, Connecticut, has about the finest pair of horses I have seen. They are fed mainly on apples and hay. They travel very fast, and seem to have both wind and bottom. It is proper however to remark, that not so much grain is given to horses at the north, as is customary at the south. One thing is worth noticing—horses fed on apples, do not eat as much hay as when they are fed on grain. Very sour raw apples injure the teeth of horses; but when boiled they do not. The rule of feeding is to commence with a small quantity and gradually increase to a bushel a day, for one horse.

8. Apples are most excellent food for beeves. The fattest beef I have seen, was made so on sweet apples.

9. Nothing will fatten mutton quicker than apples. It is necessary, or best, to cut up the apples when fed to sheep.

10. Hogs care nothing for corn if they can get apples: if sweet, the apples may be given without boiling: if sour, they must be boiled. Mixed with corn meal the flesh is firmer.

11. Apples increase the quantity and quality of milk. At first there was a prejudice against giving apples to milch cows; because it was thought they diminished or dried up the milk. It is true, that a *gorge* of apples, or any other green food, will cause a fever, and dry up the milk; but given in proper quantities, the effect is quite different.

12. Cattle and hogs are purchased and fattened on apples, and sold at a fine profit, when to fatten them on corn would ensure a loss.

13. Sweet apples and good eating apples are to be preferred as food for horses, sheep, and cows: also for hogs; though some recommend a mixture of sour and sweet for hogs.

If these remarks should induce any one to test their correctness, by making a fair experiment, the object of my writing them will be fully answered.

Thomas P. Hunt.

HOGS AND HOGPENS.

A good sty is of the utmost importance in fatting hogs. Nor is it less important for keeping them in

winter; as the more comfortably hey are kept the less nourishment they require. The sty should be proportioned in size to the number of swine it is to contain. One of sixteen feet by twelve is probably sufficient for eight fatting swine. It should be divided into two apartments; that in the rear which should be about six feet wide, should be close and warm for the hogs to lie in. Here they should have a constant supply of dry litter, when the weather is cool; for it is an essential point to keep them comfortable. The front part of the sty, which would then be about ten feet wide, should have the floor descending on one side for the filth to run off; and on this side should be an opening. The trough should be on the upper side, covered with one or more lids; and upright pieces should be set before it, at such distances apart as that one hog only could put his head between any two of them, in order that while feeding, the weaker animals should be protected against the stronger. The whole should be covered with a roof; for it is essential that they be protected from storms, while they are in the outer or feeding apartment. According to the foregoing, if sixteen hogs are to be kept or fatted in the sty, it should be thirty-two feet long and twelve wide, and in that case there might be a sleeping apartment at each end. These apartments should again be subdivided, that, for the quiet of the animals, particularly in fatting, too many may not be forced to lie together. It would probably be best also to divide the feeding apartment; for too many hogs kept together are not apt to enjoy that peace and quiet which is necessary to their fatting well. Posts should also be set up in the sty for the hogs to rub themselves. If thirty-two hogs are to be kept or fatted, then, perhaps the better way is, to have two styes, of the dimensions last described, placed together, with a roof over the whole, and a passage between them for the purpose of carrying food to the trough. If a part of the roof extended considerably beyond the sty, it would afford a convenient cover for forming a heap of compost from the dung of the swine.

AGRICULTURE.

We observe with astonishment and regret the conclusive evidence which appears in every direction that the business of agriculture does not receive the attention due to it in this country, but is treated with absolute neglect, compared with other pursuits. This ought not to be, and the inhabitants of this country will yet learn that they have committed a gross error by abandoning the cultivation of the soil for less independent and more precarious modes of obtaining a livelihood.

Who has ever heard of such a state of things as now exists here? We have a soil as fertile as any that the sun ever shone upon, a country almost boundless in extent, and land so cheap that any man may purchase a farm with the proceeds of a few month's labor, yet we are actually importing for consumption, immense quantities of agricultural products from foreign countries! A people thinly scattered over a land unequalled in fertility and exhaustless in its resources, are buying their bread at enormous prices from countries so overburthened with inhabitants that political economists have feared that the earth would fail to produce sufficient to support them. Such an extraordinary and unnatural circumstance should excite attention and awaken inquiry as to its cause.

The fault as we have seen, is not in the soil; nor is the country overrun with inhabitants. It is therefore evident that the *cultivation* of the soil is neglected, otherwise we should be exporting instead of importing agricultural products. But it is easier to show the fact, that agriculture is neglected, than to find a sufficient reason for such neglect. We apprehend, however, that it will be found to spring in a great measure from the same causes which have produced much evil in this country and the bitter fruits of which we are now reaping. The first and chief of these causes is the inordinate thirst for wealth which pervades every class of society, and induces men to abandon their legitimate business to engage in some wild hazardous speculation with the hope of becoming suddenly rich. It is also too often the case that the farmer becomes tired of the moderate and gradual accumulation of property by the products of his land, and leaves the cultivation of it to engage in the business of commerce or manufactures. He finds out his egregious mistake when it is too late. The property he had accumulated is often squandered and lost in consequence of his ignorance of new business, and he again sighs for the cheerful and independent mode of life which he has abandoned, when it is out of his power to resume it. We have in our mind numberless instances of this kind, where industrious and prosperous farmers have been lured to their ruin by being induced to lay aside the implements of husbandry, and engage in the universal scramble after sudden wealth.

There is another great error prevalent upon this subject, and that is the business of agriculture is generally looked upon as less respectable than that of commerce, manufactures, or the professions; and wealthy farmers, instead of teaching their sons their own business, most usually transform them into merchants, lawyers, doctors or dominees. This is all wrong. Agriculture is the very back bone of all business, the main spring of all wealth, and should be regarded as a profession of the highest respectability. It gives those engaged in it a feeling of independence, genuine nobleness without ostentation, honor, honesty and firmness, well calculated to perpetuate the free institutions of our happy country. The truth of the eloquent panegyrics of the ancients upon this employment may be more easily realized here than in any other country upon earth. We confidently hope to see public opinion speedily righting itself upon this subject, and to find people seeking their permanent interests and advancing the prosperity and glory of our wide doman by engaging more generally in this healthful, honest aud independent business.—*N. Y. Sun.*

THE CULTURE OF SILK.

NEW COCOON FRAME.

Eph. Cheesborough of New London, has invented a cocoon frame, which is highly commended in the Silk Culturist. He describes it is as follows:

Take a piece of 1 3-4 inch pine plank, and with a very keen seven-eighths of an inch centre bitt bore a hole through the plank in every square inch of its surface, making 144 holes to every square foot. The cores between the holes serve to hold the wood together and support and keep the plank from splitting. Nail an iron hoop all around the edge, and it cannot split. Insert in the four corners legs four inches long, and occasionallv through the middle, pins of the same length, between the holes, for the worms to crawl up on. When it is necessary to use it, set it over the worms on their shelf, and when sufficiently filled, remove it to the side of the room; and if another is wanted, put it in the place from which the full one is taken.

The advantages of this frame are numerous and important. 1st. The holes being only about the size of a cocoon, no room is left for the worm to spin floss, but nearly all the silk is converted into the cocoon that will reel.

2d. Being placed so near the worms they ascend into the holes much easier than they could crawl up bushes, and therefore are on the spot almost in the moment they want to spin.

3d. The worms are entirely prevented from making dupions, or double cocoons, which are worth only half price.

4th. If, as is always the case, some late or lazy worms should be left on the shelf or table, they may be easily taken up by the hand and dropped into the empty holes in the frame, where they will soo begin to spin.

5th. The use of this frame keeps the worms not yet risen from the table much cleaner, as the frame when nearly filled may be removed, and the worms left behind are freed from the inconvenience of being soiled by those already risen.

6th. The floss or waste silk, (as there will always be some,) will be much cleaner, being entirely freed from dirt, or broken bits of leaves.

The frame is convenient and very durable. Banded round with an iron hoop well nailed on, it will last for ages.

The frames on a large scale bored by a machine, will cost from five to six cents a square foot, and the saving in the quantity and quality of the silk, will soon pay all the expenses of the frame.

The six cocoons in the sample of the frame sent herewith are in one inch holes, which are evidently too large, seven-eighths or even three-fourths inch holes are better.

THE VALUE OF POOR LAND FOR SILK.

'There is perhaps no branch of human industry offering so many and such strong inducements to pursue it, as does the silk culture. For in five or six weeks, with care and attention, the whole labor of producing the raw silk is over, and such is the immense net profit resulting from it, that a very few acres of even the *poorest land*, in that time, will yield sufficient to support an ordinary sized family in comfort. The poorest sands and gravel, with very little manuring, will produce the mulberry as kindly as the richest and most generous soils.

'It is known, too, that the foliage raised on the former, imparts more elasticity and lustre to the silk, and is infinitely better suited to the production of the article, than that which is grown on the best and most fertile lands. An advantage such as this, is of immense value to the country, as it places the most sterile portion on an equality at least, with the most high priced lands in the country.'—*Silk. Cult.*

EXPERIMENTS WITH STEEP.

December 7, 1787—Sowed fourteen beds with the same wheat seed, as black with the smut as ever I saw any.

No.		*Smutty ears.*
1	Sown dry, nothing done to it, had	377
2	Washed well in clean water, had	325
3	do in lime water, had	43
4	do in a lye of wood ashes, had	31
5	do in arsenic and salt mixture, had	28
6	Steeped in lime water 4 hours, had	12
7	do in lye 4 hours, had	3
8	do in arsenic 4 hours, had	1
9	do in lime water 12 hours, had	6
10	do in lye 12 hours, had	0
11	do in arsenic 12 hours, had	4
12	do in lime water 24 hours, had	0
13	do in lye 24 hours, had	0
14	do in arsenic 24 hours, had	5

—*Young's Annals.*

☞ STATE AGRICULTTRAL CONVENTION.

☞ In pursuance of a resolution adopted at the last Agricultual Convention, we hereby give notice that a State Agricultural Convention will be held at the Capitol, in the city of Albany, on the first Thursday of February next, at 4 o'clock, P. M. at which "all persons are desired to attend who take an interest in agricultural pursuits."

D. S. DICKINSON, J. J. VIELE, *Secretaries.*

Agricultural School.

AN election for thirty Directors of the New-York State Agricultural School, will be held at the Capitol in the city of Albany, on the 15th Feb. next, at 4 o'clock, P. M.
Jan. 5, 1837.

J. BUEL, L. F. ALLEN, H. YATES. J. DELAFIELD, } Commissioners. { J. P. BEEKMAN, J. CENTER, W. CUNNINGHAM.

Subscriptions to the stock of the Company will be received by the several commissioners until the day of election.
jan 14 f3

To be Sold,

A VERY excellent Farm, beautifully situated, adjoining the village of Ancaster, near the head of lake Ontario, Upper Canada, about 7 miles from Hamilton and Burlington Bay; consisting of 200 acres (40 chains wide by 50 chains deep.) About 120 are in cultivation. There is a comfortable house, a well, &c. frame barn, a stable, wagon house separate from the barn, a good old orchard in full bearing, and the farm is well watered, having the Ancaster mill stream passing thro' it, and affords a sufficient fall for a flour mill. As two of the surveyed lines of the great western rail-road pass through the farm, the probability is that many village lots may be sold on the line adopted. Apply to the proprietor on the premises, or to the subscriber in Rochester.
jan 14 6t LUTHER TUCKER.

For Sale,

THE valuable Farm formerly owned by General Charle Thompson, situated in the town of Ovid, Seneca county, 3 1-2 miles south west of the village of Ovid, extending to the Seneca lake, containing about 370 acres of land; half of it improved, under a high state of cultivation and in first rate repair; the remainder valuable timbered land, a large proportion of it white oak. On the premises is a large well finished two story dwelling-house, wood house, 4 tenant houses, 3 grain barns, with sheds and hay barns, &c.; the stock in which is included. 700 Saxony sheep will be sold with the farm if desired. For further information inquire of ASA PAGE, Esq. Schenectady; DAVID HUDSON, Esq. Geneva; or of the subscriber on the premises.
WM. R. SCHUYLER.
jan 14 4t

WINTER STALL FEEDING,

Is the only profitable mode, in this climate, of fattening cattle for the shambles in winter. Were they suffered to roam in the yard and field, exposed to the wet and cold, it is very evident they could take on flesh but slowly, and but illy compensate the owner for the expense of high keeping. A certain quantity of food is required to prevent their growing lean; all beyond this it is the design of the feeder to have manufactured into meat and tallow; or as Bakewell was wont to say, converted into money. It is all important on the score of profit, that this process of converting herbage and other animal food into money, should be managed as expeditiously as a well judged economy will permit. Upon this, as upon every other branch of husbandry, we may profit from the experience of others, if we are not too conceited and fastidious in our own opinions. Young says, that "men farm without an idea of the necessity of knowing what others have done before them; and it is very right that thousands of pounds should be lost, by feeding beasts in open sheds, by men who think they can learn nothing beyond the practice of old women, their grand mothers, while the board of agriculture has annually brought to light practices unknown to the same men who cannot see any use in such publications."

As to the relative advantages in the economy of feed, of having fattening cattle tied up, we have the declaration of Mr. Ellman, well known as a distinguished herdsman, "that nine oxen, fed loose in a yard, have by eating as well as destroying, consumed as much as 12 when tied up." Although much may be said in favor of keeping cows and store cattle, in covered sheds, instead of close stables, there is no doubt but fattening beasts thrive best when constantly confined in a warm stable, when proper attention to cleanliness is observed. We abstract the following rules, regarding the management of stall feeding cattle, from the 12th No. of British Husbandry:

"The first point is the comfort or accommodation; for in whatever way they may be placed,—whether under sheds or in close ox-houses, they should have the security of perfect shelter from the weather, with a certain degree of warmth; that is to say—if in open trammels, the sheds should be broad, the roof low, and the floor covered with an abundance of dry litter. We are, however, decidedly of opinion, that close stalls will further the objects more promptly; though we do not coincide with the idea that it will be promoted by too much heat, and we should therefore recommend a moderate degree of healthful ventilation. In these stalls litter is, indeed, very frequently dispensed with,—or else sand, or any rubbish, is substituted for straw, but there can be no doubt that the animals enjoy the comfort of a dry bed as well as their master, and the more they seek repose in it the better.

"The next is strict regularity to the administration of food—both as regards the stated quantity and the time of supplying it. The periods may be afterwards altered. The ox is a quiet animal, and those which are fed in the house soon acquire a precise knowledge of the exact hour at which it is usually given: if that be transgressed, or the customary quantity be not furnished, they become restless; but if the time and quantity be strictly abhered to, they remain tranquil until the next period arrives. If no disturbance takes place, they then generally lie down and ruminate and nothing will be found more to forward the process of fatting than this perfect quietude: wherefore should the stalls be not only well bedded, but light should be very much excluded, the doors should be closed, all outward annoyances as far as possible prevented—and, in short, every means should be induced to promote complete rest, ease and contentment.

"Some persons serve it out as often as five times in a day: but the most prudent and we think the better practice, is to give it as soon as possible after day-light, at noon and sometime before sun-set: which enables the animals to fill their bellies, and to have time sufficient for that quiet digestion which is interrupted by too frequent feeding. In stating that the quantity should be moderate, we however allude merely to the not allowing the animal to have so much as will cloy him: he ought to have as much as he can fairly eat with a relish, but the moment he begins to toss it about, it will be then evident that the keenness of his appetite is satisfied, and it should be instantly removed.

"The last is thorough cleanliness. The ox-house should be opened before day light and well cleaned by pail and broom, from every impurity.—After the animals have been satisfied with food, whatever may remain should be immediately removed and the cribs and mangers should be carefully swept out, and washed if necessary; water should then be given without limitation."

As to the food we will add, that fatting animals should have in winter, grain, or roots, or oil-cake. Beef cannot be made on hay alone. In Great Britain, where they boast of their beef, turneps are generally employed; in the Unitee States the coarse grains are mostly used. As our turnep culture progresses, and progress we are confident it will, we shall be able to make cheaper if not better beef. Assuming that 600 bushels of Swedish turneps will grow upon an acre of ground that will produce thirty-five bushels of corn, and that six bushels of the Swedes will fatten as much as one bushel of corn, it will be seen that one acre in ruta baga will go about as far in making beef as three acres in corn, with the further advantage, that the latter will cost four times as much labor in its culture as the former. Now we give an instance, in another column of the Swedes yielding more than 1500 bushels to the acre, and the opinion of an intelligent feeder, that two bushels are worth as much, for feeding, as one bushel of corn. The mangold wurtzel, the carrot and the parsnep, may be all raised in field culture, at about the expence per acre as corn; and they will give as great a yield, and afford as much nutriment as the ruta baga. The potato, whose culture we are all acquainted with, should be made to yield 300 bushels per acre: and these afford a far more profitable feed than grain. A bullock will consume from 120 to 240 lbs. of ruta baga per day: but if full fed with this or other roots they will consume but little hay, and have little or no occasion for water.—*Cultivator.*

Firewood and Timber.

Firewood, as well as Timber, should be felled when the sap is down; otherwise it will contain less substance in proportion to its bulk, and snap and smoulder away, giving but little heat. The farmer will do well to obtain his year's stock of fuel as early in the winter as possible, before the depth of snow in the woodlands renders it difficult to traverse them with a team.

Gen. Newhall, of Lynfield, Mass. in a communication for the *N. E. Farmer*, observes as follows:

"Having woodland from which I have cut annually, for several years past, from twenty to fifty cords of wood, it has been my practice to have it cut at the time, and in the *manner* that would best ensure a strong and vigorous growth of sprouts. To effect this purpose, I never allow a tree to be cut till after the autumnal frosts have caused the leaves to fall, and the sap to descend into the roots, nor later in the vernal season than the middle of April. The *manner* of cutting is to leave the stumps nearly on a level with the surface of the ground, from which the suckers are much more strong and vigorous, and less liable to be injured by high winds, than a growth from stumps cut ten or twelve inches high, as is the practice with some.

"Pursuing this course, I have never been disappointed, and have now on land, from which trees were cut in the midst of winter, a growth of sprouts of the most vigorous and promising appearance.

"Respecting large trees of the growth of centuries, cut them at whatever season you please, there is scarcely one stump in a thousand that will produce suckers."

Timber growing in open land or on the border of woods is best. That which grows on dry land has less sap, and is more solid than that growing in swamp.—Elm and Beach are good and durable under water. Elm holds a nail better in water than any other timber. Evergreens decay externally, oak, chestnut and maple decay first internaly. The sap of white wood or walnut is tough, the heart brittle.

Loudon says that "the season for felling timber not to be disbarked, is commonly winter, but some, for the resinous tribe, recommend the summer season in whi h it is generaly felled in the north of Europe and in the Alps. But the summer season is there adopted from neccessity, as in winter the woods are so filled up with snow, that felling is hardly practicable. As the timber of those countries is generally squared for market, the sap wood is chiefly removed, so that the season of felling does not seem to them as of much consequence. Besides, the timber is never so full of sap in summer, as in spring and autumn, and therefore, next to mid-winter midsummer may be the next best time for felling all kinds of timber trees."

The Farmer's Assistant contains the following judicions remarks on this subject:

"The right time for felling trees for timber, is in December and January, when the sap is down, as in this case it is less liable to be eaten by worms, and will last much longer.

"By experiments made by M. Buffon, it is found that trees which are stripped of their bark in May or June while standing, and cut down the next winter for timber, are found to make the most solid, heavy and strong timber, and that even the sap is then good. The bark of oak and some other trees may, at that time be stripped off to advantage for the use of tanning.

"Soaking timber in salt water is very good to increase its strength and durability.

"In order to preserve timber from cracking, while seasoning, let it be blocked out for the purpose wanted, and laid in a hay mow when the hay is carted in.—When the hay is dealt out the next winter, the pieces may be taken out well seasoned, and free from cracks. This is an excellent plan for seasoning all kinds of timber for carriages, &c. When this is done, if the trees are felled in winter, let them lie in logs till hay time arrives.

"We are assured by an experienced builder of some of the first rate bridges in the northern part of this country, that such timber as is to be exsposed to the water, or to frequent wetness, should be felled during the *increase* of the moon; and that such as is intended to be kept dry should be felled during the *decrease* of that planet. We find it also ascertained, by satisfactory experiments, as published in "the Memoirs of the Philadelphia Society for the Promotion of Agriculture," that timber used for fencing posts, will last considerably longer by setting the end in the ground which was uppermost as it grew."—*N. E. Farmer.*

Remedy for Flies on Sheep.

Hog's lard or soft grease 2 lbs.
Flour of Sulphur, 1
Oil of Amber, 1-2 pint.

Mix the whole into an ointment, and rub as much as would make a ball the size of a walnut, and smear it on each sheep, either with the hand or a common brush. If the oil of amber cannot readily be procured, common tar, or oil of tar, or coal tar, may be substituted for it.

THE VIRTUES OF SUGAR.—Sir John Pringle asserts that the plague has never visited any country where sugar composes a material part of the diet of the inhabitants. Cullen, Rush, Fothergill and many other eminent physicians think malignant fevers, lessened in their virulence by the use of sugar. Well attested maratime facts prove it to be a powerful anti scorbutic. It is a perfect antidote to the poison of verdigris. In China and in India, it is the main article of diet for the inhabitants. In Cochin China, the king's body-guards are obliged to eat every day, a certain quantity of sugar, in order to preserve their *embonpoint* and good looks; and the wildest horses, elephants, and buffaloes, are tamed by the daily use of sugar. It is a mistake to suppose that sugar injures the teeth; no persons have whiter teeth than the negroes, particularly during crop time: and it is equally absurd to suppose that the use of sugar produces worms in children. *Vernes* arises from an insufficiency of salt and bitters in the food of infants; provided those tonics be given, the more sugar is given to a child the greater will be its health and strength.

☞ With pleasure we again acknowledge the receipt of One Hundred and Fifty Dollars, from the Rhode Island Society for the Promotion of Agriculture, to pay for the New England Farmer, for distribution among its members. Let other Agricultural Societies go and do likewise, and we promise them that our most earnest endeavors will be to render a fair and full equivalent.—*N. E. Far.*